

160.

MERCHANT

102

PRIVATE DATABASE
 $m_c, c=1, \dots, N$

PUBLIC DATABASE

$$\begin{aligned} (c_{ii}, z_i, \text{desc}_i, \text{tag}_i) \\ \mathcal{L}_i = (\gamma^T k_i, q^T) = F_{\{j\}}(k_i) \\ \mathcal{L}_i = F_{\{k, j\}}(m_i) \end{aligned}$$

PAYMENT
SERVER

COMMUNICATION CHANNEL (5)

104

120

NETWORK

customer

106

USER
DEVICE

Fig. 1

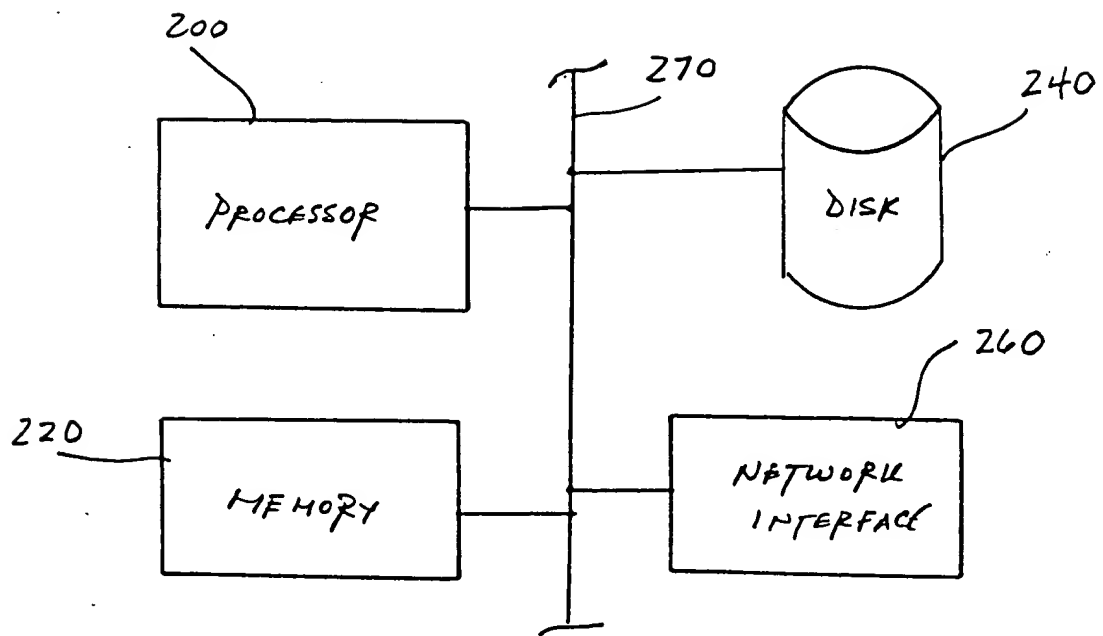


FIG. 2

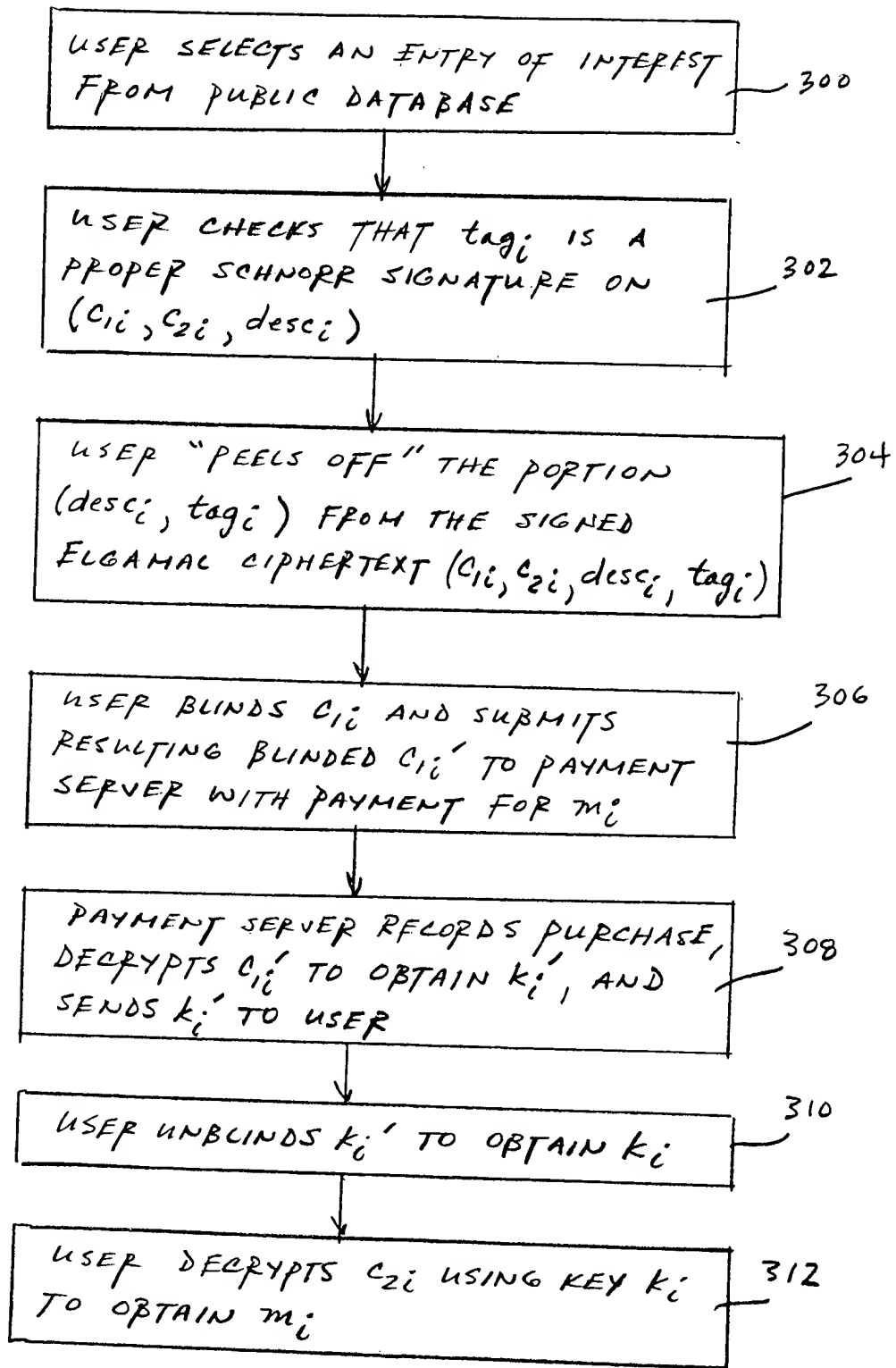


FIG. 3